

# ABSTRACT

A fluid-flow machine (turbomachine) includes at least one rotor  
5 equipped with blades and at least one stator equipped with vanes,  
the rotor being supported in a casing by means of a rotating  
shaft. A form of annulus is provided whose cross-sectional area  
in a stage consisting of at least one rotor and one stator  
results in a rotor-stator contraction ratio QRS which satisfies  
10 the equation:  
$$[0.2 + (KT - 0.45)^{0.1}] < QRS < 3.0,$$
  
where KT is the total-stage contraction.